IAP12 Rec'd PCT/PTS 0 & JAN 2006

What is claimed is:

- 1. A reusable fluid dispenser comprising:
 - a) subsystem B having a fluid reservoir adapted for containing a fluid, the fluid reservoir comprising:
 - (i) a fluid outlet adapted for dispensing fluid contained in the fluid reservoir;
 - (ii) a separator movably positioned in a dispensing position to bias fluid contained in the fluid reservoir out of the fluid outlet, to dispense the fluid through the fluid outlet;
 - (iii) a fluid inlet positioned for recharging the fluid reservoir with the fluid while biasing the separator into the dispensing position; and
 - b) subsystem A having a power head assembly removably attached to the fluid reservoir comprising a gas generator in fluid communication with the separator, wherein gas generated by the gas generator is communicable to the separator to move the separator to dispense the fluid, wherein a union seal couples subsystem A to subsystem B so as to limit escape of the gas generated by the gas generator in communication with the separator, to form a sealed union of subsystem A with subsystem B.
- 2. The apparatus of claim 1, wherein said fluid inlet comprises a one-way fluid fitting.
- 3. The apparatus of claim 1, wherein said separator is capable of preventing gas from moving into said reservoir.
- 4. The apparatus of claim 1, wherein said gas generating means is capable of generating gas by a gas generating reaction selected from the group consisting of a spontaneous electrochemical reaction, a non-spontaneous electrochemical reaction, and a spontaneous thermochemical reaction.
- 5. The apparatus of claim 4, wherein said gas generating reaction is spontaneous.

- The apparatus of claim 4, wherein the rate of said gas generating reaction is 6. adjustable.
- The apparatus of claim I, wherein said fluid is a lubricant. 7.
- The apparatus of claim 7, wherein said lubricant is a bearing grease. 8.
- The apparatus of claim 7 in which the lubricant is an oil. 9.
- The apparatus of claim 1, wherein said separator is selected from the group 10. consisting of a bellows, a bladder, a piston, bellows and piston, and bladder and piston.
- The apparatus of claim 1, wherein said separator comprises a bellows and piston. 11.
- The apparatus of claim 1, wherein said fluid is replaceable. 12.
- The apparatus of claim 1, wherein said power head assembly is replaceable. 13.
- The apparatus of claim 1, wherein said apparatus has replaceable components, 14. selected from the group consisting of:
 - a power head comprising: i)
 - a. a switchboard, a battery, a non-spontaneous electrochemical cell and a switchcap or
 - b. a switchboard, a spontaneous electrochemical cell and a switchcap, or
 - c. a reactive (thermo-chemical) solid element, a reactive liquid and means to bring the solid element and the reactive fluid into contact;
 - a cylinder or a lubricant reservoir; ü)
 - a bellows comprising a mounting base; iii)
 - a bladder comprising a mounting base; iv)
 - a piston; v)
 - a locking ring; vi)
 - the fluid; and, vii)
 - a union seal for coupling Subsystem A to Subsystem B so as to prevent the viii) escape of gas from the union. 17